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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,569	09/08/2003	Yuji Akimoto	Komatsu Case 293	9860

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EXAMINER	
WYSZOMIERSKI, GEORGE P	

ART UNIT	PAPER NUMBER
1742	

DATE MAILED: 03/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/657,569	AKIMOTO ET AL.	
	Examiner	Art Unit	
	George P Wyszomierski	1742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-11 is/are pending in the application.

4a) Of the above claim(s) 6-11 is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-5 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 20030908.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

GB

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-5, drawn to a method for manufacturing powder, classified in class 75, subclass 369.

II. Claims 6-9, drawn to metal powders and pastes containing the same, classified in class 420, subclass various (depending on the composition of the powder).

III. Claims 10 and 11, drawn to multiplayer electronic parts containing conductor layers, classified in class 174, subclass 257.

2. The inventions are distinct, each from the other because:

Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by another, materially different process, as evidenced by pages 3-6 of the present specification.

Inventions II and III are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as a material for producing magnets and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if

the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Inventions I and III are prima facie independent and distinct inventions, i.e. the process of Group I would not result in the product of Group III and nothing in the Group III claims bears any discernable relationship to the process as defined in Group I.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their different classification and recognized divergent subject matter, restriction for examination purposes as indicated is proper.

3. During a telephone conversation with Terryence Chapman, attorney of record on March 3, 2005 a provisional election was made with oral traverse to prosecute the invention of Group I, claims 1-5. Affirmation of this election must be made by applicant in replying to this Office action. Claims 6-11 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

4. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akimoto et al. (PG Pub. no. 2002/0000137).

Akimoto discloses producing highly crystallized metal or alloy powders by preparing raw material powders containing compounds of one or a plurality of metals desired, supplying those powders to a reaction vessel together with a carrier gas, and producing metal powders by heating under temperature and concentration conditions as recited in the last seven lines of instant claims 1 or 5. With respect to instant claim 2, note paragraph [0021] of Akimoto. With respect to instant claim 3, the examiner's position is that whatever the particle size is of the raw material powder in the prior art fully meets the limitations of this claim; nonetheless, note paragraph [0022] of Akimoto for a discussion of adjusting particle size.

Akimoto does not disclose the ratio V/S > 600 (of flow rate of carrier gas to cross sectional area of nozzle) as defined in the instant claims. However, the examiner notes that the prior art involves a process of making substantially the same powders as the present invention (Ni, Ni-Cu, Pd-Ag) from the same raw materials (e.g. nickel acetate tetrahydrate). The examiner's position is that performing the prior art process under the conditions as specified in the instant claims would fall within the purview of the Akimoto process. Therefore, the Akimoto et al. disclosure is held to create a prima facie case of obviousness of the presently claimed invention.

7. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akimoto et al., as above, in view of Gonzalez et al. (U.S. Patent 5,508,015).

Gonzalez, column 2, lines 7-42 indicates that it was known in the art, at the time of the invention, that it is preferable to employ a high ratio of carrier gas to a nozzle size with minimum cross-sectional area in processes of making powders by the reaction of raw material powders. Therefore, to employ the high ratio as presently claimed when performing the process as disclosed by Akimoto et al. would have been considered an obvious expedient by one of ordinary skill in the art.

8. Claims 1-5 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-10 of copending Application No. 10/630394.

Although the conflicting claims are not identical, they are not patentably distinct from each other because both the instant claims and the '394 claims are drawn to a series of process steps for making highly crystallized powders by reacting starting material components in a carrier gas under the same set of temperature, concentration, and gas flow rate to nozzle opening ratios in both instances. The difference between the present claims and the '394 claims is that the presently claimed process results in metal powders, while that of the '394 claims results in oxide powders. The examiner's position is that one of ordinary skill in the art would easily be able to select appropriate starting materials so that the formation of either a metal powder or an oxide powder would be thermodynamically favorable, i.e. one would be able to determine this by consulting standard reference textbooks for the heats of formation of starting materials, and the relevant metals and oxides. Because the same process steps are

employed under the same set of conditions in both the present claims and the '394 claims, no patentable distinction is seen between the processes as defined in the two sets of claims.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

9. The remainder of the art cited on the attached PTO-892 and 1449 forms is of interest. This art is held to be no more relevant to the claimed invention than the art as applied in the rejections, supra.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Wyszomierski whose telephone number is (571) 272-1252. The examiner can normally be reached on Monday thru Friday from 8:00 a.m. to 4:30 p.m. Eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King, can be reached on (571) 272-1244. Effective October 1, 2003, all patent application related correspondence transmitted by facsimile must be directed to the central facsimile number, (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GEORGE WYSZOMIERSKI
PRIMARY EXAMINER
GROUP 1700

GPW
March 7, 2005